

Notice of Allowability

Application No.

09/454,740

Applicant(s)

Hillebrand et al.

Examiner

Arun Chakrabarti

Art Unit

1634



--The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 2/21/03.
2. ☒ The allowed claim(s) is/are 2-5, 7-9, and 27-36.
3. ☒ The drawings filed on Dec 6, 1999 are accepted by the Examiner.
4. ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/454,740.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

5. ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No. _____.
- (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the examiner.
- (c) ☐ including changes required by the attached Examiner's Amendment/Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the top margin (not the back) of each sheet. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1 <input type="checkbox"/> Notice of References Cited (PTO-892) | 2 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4 <input checked="" type="checkbox"/> Interview Summary (PTO-413), Paper No. <u>0503</u> |
| 5 <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449), Paper No(s). _____ | 6 <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 7 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| 9 <input type="checkbox"/> Other | |

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EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Ted Gottlieb on May 28, 2003.

The application has been amended as follows:

Claims 1, 10 and 11 were canceled without prejudice towards further prosecution.

The following claims were amended.

30. (Amended) A kit for isolating nucleic acids in the absence of a chaotropic salt, wherein one or more nucleic acids bind to a substrate, the kit comprising:

a) a lysis/buffer system comprising at least one antichaotropic salt at a concentration that allows binding of said one or more nucleic acids to said substrate,

b) said substrate, and

c) optionally, one or more detergents and/or other additives;

wherein all carriers having a negatively functionalized surface(s) which may be converted to a negative charge potential, serve as the substrate means and wherein the surface of the

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substrate is modified by at least one chosen from the group consisting of an acetyl group, carboxyl group and hydroxyl group.

31. (Amended) The kit according to claim 30, wherein at least one protein-degrading enzyme proteinase K is included in the lysis/buffer system.

3. (Amended) The kit according to claim 30, wherein the lysis/ buffer system contains detergents and additives.

5. (Amended) The kit according to claim 30, wherein the lysis/buffer system contains an alcohol for binding to the substrate.

7. (Amended) The kit according to claim 30, wherein the lysis/buffer system is an aqueous solution.

8. (Amended) The kit according to claim 30, wherein the lysis/buffer system is stable in storage in reaction vessels.

Reasons for Allowance

2. The following is an examiner's statement of reasons for allowance: In view of the examiner's amendment, the present invention is directed to a kit for isolating nucleic acids in the absence of a chaotropic salt, wherein one or more nucleic acids bind to a substrate, the kit comprising:

a) a lysis/buffer system comprising at least one antichaotropic salt at a concentration that allows binding of said one or more nucleic acids to said substrate,

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b) said substrate, and

c) optionally, one or more detergents and/or other additives;

wherein all carriers having a negatively functionalized surface(s) which may be converted to a negative charge potential, serve as the substrate means and wherein the surface of the substrate is modified by at least one chosen from the group consisting of an acetyl group, carboxyl group and hydroxyl group.

Although Heath (U.S. Patent 5,973,137) (October 26, 1999) teaches a kit for isolating nucleic acids in the absence of a chaotropic salt, wherein one or more nucleic acids bind to a substrate, the kit does not comprise a substrate, wherein all carriers having a negatively functionalized surface(s) which may be converted to a negative charge potential, serve as the substrate means and wherein the surface of the substrate is modified by at least one chosen from the group consisting of an acetyl group, carboxyl group and hydroxyl group.

In view of the absence of either teaching or suggestion of such a kit for isolating nucleic acids in the absence of a chaotropic salt, wherein one or more nucleic acids bind to a substrate, and wherein all carriers having a negatively functionalized surface(s) which may be converted to a negative charge potential, serve as the substrate means and wherein the surface of the substrate is modified by at least one chosen from the group consisting of an acetyl group, carboxyl group and hydroxyl group, the present invention is novel and non-obvious.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

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fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arun Chakrabarti, Ph.D., whose telephone number is (703) 306-5818. The examiner can normally be reached on 7:00 AM-4:30 PM from Monday to Friday. If attempts to reach the examiner by telephone are unsuccessful, the primary examiner in charge of the prosecution of this case, Jeffrey Fredman, Ph.D, can be reached at 703-308-658. If attempts to reach the examiners by telephone are unsuccessful the examiner's supervisor, Gary Benzion, can be reached on (703) 308-1119. The fax phone number for this Group is (703) 746-4979. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group analyst Chantae Dessau whose telephone number is (703) 605-1237.

Arun Chakrabarti,

Patent Examiner,

June 24, 2003


GARY BENZION, PH.D.
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